## DL-1000X Data Logger

**SPECIFICATIONS** #E128

## Low Power, High Capability.

The **DL-1000X** is a high precision data logger designed to provide measurement and control for a wide variety of applications. Its reliability and ruggedness make it an excellent choice for remote environmental applications, including weather stations, mesonet systems, wind profiling, air quality monitoring, hydrological systems, water quality monitoring, and

hydrometeorological stations.

This low powered instrument features multiple capabilities including sensor measurement, direct communication and telecommunications, data analysis, ability to control external devices, and onboard nonvolatile storage—just to name a few.

## Additional features of the DL-1000X data logger include:



**Setup easily** with PC software, USB, and ethernet connectivity. The DL-1000X is internet ready.



**Ease your mind** with knowledge that electronics are RF shielded by a unique sealed, stainless-steel canister.

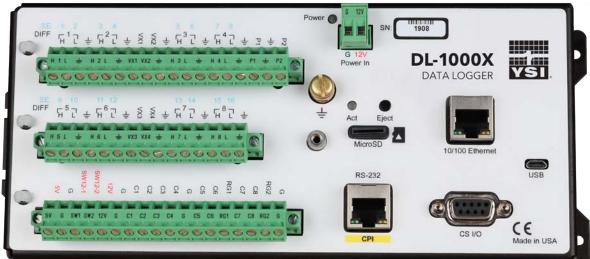


**Support sensor measurement,** data processing and analysis routines with the onboard, BASIC-like programming language.





**Save money and space** with the DL-1000X's microSD card drive for extended memory requirements





General Specifications	
CPU	32 bit with hardware FPU, running at 100 MHz
Internal Memory	128 MB flash and 4 MB battery-backed SRAM
MicroSD Drive	Extended data storage up to 8 GB
Clock Accuracy	±3 min per year, optional GPS correction to 10 μs
Connection	USB micro B for direct connection to PC–2.0 full speed, 12 Mbps RS-232/CPI Port for terminal expansion CS I/O Port for connection to communications and displays 10/100 Ethernet RJ45 for LAN connection
Supported Protocols	PakBus, Modbus, DNP3, NTCIP, NMEA 0183, and many more
Removable Power Terminal	For connecting BPALK, PS150, PS200, or other power supply
Switched 12 V Terminals	Two Switched 12 V Terminals for powering sensors or communication devices, 1.3 A @ -40°C, 0.47 A @ 80°C
Power Drain	Power Drain @ 12 Vdc: < 1 mA (idle), 1 mA (active, 1 Hz scan), 55 mA (active, 20 Hz scan), active + 25 mA (RS-232/RS-485), active + 48 mA (Ethernet link)
Sensor Excitation	Four Sensor Excitation (VX1 - VX4) for sensor excitation or regulated supply
Ground Terminal	100 Ohm Resistive Ground Terminal for measuring 0 to 20 mA or 4 to 20 mA outputs
Analog Input Terminals	Analog Input Terminals (SE1 - SE16)  16 single-ended or 8 differential inputs with ±5000 mV ranges  24 bit ADC  Ratiometric Bridge  Thermocouple  Period Averaging
Pulse Counting Terminals	Two Pulse Counting Terminals (P1, P2)  Switch closure  High frequency counter  Low level AC  High frequency counter
Control Terminals	Eight Control Terminals (C1 - C8): C terminals are software configurable for digital functions. Digital I/O functions consist of 5 V output and 3.3 V input logic levels for:  SDI-12 General status/control Voltage source 5 V: 10 mA@ 3.5 V High frequency counter Interrupts  Interrupts
Analog Accuracy	$\pm (0.04\% \text{ of measurement} + \text{ offset})$
Effective Resolution	0.02 μV RMS
Weight	0.86 kg (1.9 lb)
Dimensions	23.8 cm x 10.1 cm x 6.2 cm (9.4 in x 4.0 in x 2.4 in)







Tel +1.937.767.7241 800.897.4151 info@ysi.com









